FIG. 1

1   OBJECT

2   X RAY TUBE

3   DIAPHRAGM

3a, 3b   SHIELDING BODY

4   DIAPHRAGM VARYING UNIT

6   IMAGE PROCESSING UNIT

61   STATISTICAL DATA PROCESSING UNIT

62   LINE NOISE CORRECTION UNIT

7   IMAGE DISPLAY UNIT

8   ARM

9   X RAY GENERATION UNIT

10   OPERATION UNIT

11   CONTROL UNIT

FIG. 2

X RAY

3   DIAPHRAGM

OPENING

52,53 SHIELDED PORTION

51   EFFECTIVE VISUAL FIELD

FIG. 3

STEP 31: SET X-RAY CONDITION (FLUOROSCOPY) AND DIAPHRAGM POSITION

STEP 32: IRRADIATE OBJECT WITH X RAYS

STEP 33: DETECT X RAYS PASSED THROUGH OBJECT

STEP 34: PERFORM STATISTICAL PROCESSING ON DATA OF SHIELDED PORTION

STEP 35: PERFORM LINE NOISE CORRECTION PROCESSING ON FLUOROSCOPIC IMAGE

STEP 36: DISPLAY FLUOROSCOPIC IMAGE

FIG. 4

6   IMAGE PROCESSING UNIT

61   STATISTICAL DATA PROCESSING UNIT

62   LINE NOISE CORRECTION UNIT

63   CORRECTION EXECUTION SWITCHING UNIT

7   IMAGE DISPLAY UNIT

10   OPERATION UNIT

11   CONTROL UNIT

FIG. 5

STEP 51: SET X-RAY CONDITION (ARBITRARY) AND DIAPHRAGM POSITION

STEP 52: IRRADIATE OBJECT WITH X-RAYS

STEP 53: DETECT X-RAYS PASSED THROUGH OBJECT

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STEP 54: X-RAY CONDITION = FLUOROSCOPY?

STEP 55: PERFORM STATISTICAL PROCESSING ON DATA OF SHIELDED

PORTION

STEP 56: PERFORM LINE NOISE CORRECTION PROCESSING ON

FLUOROSCOPIC IMAGE

STEP 57: DISPLAY X-RAY IMAGE

FIG. 6

6   IMAGE PROCESSING UNIT

61   STATISTICAL DATA PROCESSING UNIT

62   LINE NOISE CORRECTION UNIT

64   SCATTERED RAY ELIMINATION PROCESSING UNIT

7   IMAGE DISPLAY UNIT

10   OPERATION UNIT

11   CONTROL UNIT

FIG. 7

STEP 71: SET X-RAY CONDITION (FLUOROSCOPY) AND DIAPHRAGM

POSITION

STEP 72: IRRADIATE OBJECT WITH X-RAYS IN ACCORDANCE WITH X-RAY

CONDITION (FLUOROSCOPY) AT SET DIAPHRAGM POSITION

STEP 73: DETECT X-RAYS PASSED THROUGH OBJECT

STEP 74: SCATTERED X-RAY ELIMINATION?

STEP 75: ELIMINATE SCATTERED X-RAY PORTION FROM SHIELDED

PORTION

STEP 76: PERFORM STATISTICAL PROCESSING ON DATA OF SHIELDED
PORTION

STEP 77: PERFORM LINE NOISE CORRECTION PROCESSING ON
FLUOROSCOPIC IMAGE

STEP 78: DISPLAY X-RAY IMAGE

FIG. 8

1   OBJECT

2   X-RAY TUBE

3   DIAPHRAGM

3a,3b SHIELDING BODY

4   DIAPHRAGM VARYING UNIT

6   IMAGE PROCESSING UNIT

61   STATISTICAL DATA PROCESSING UNIT

62   LINE NOISE CORRECTION UNIT

7   IMAGE DISPLAY UNIT

8   ARM

9   X-RAY GENERATION UNIT

10   OPERATION UNIT

11   CONTROL UNIT

12   DIAPHRAGM

FIG. 9

STEP 91: SET X RAY CONDITION (RADIOGRAPHY) AND DIAPHRAGM POSITION OF FIRST DIAPHRAGM

STEP 92: IRRADIATE OBJECT TO BE EXAMINED WITH X RAYS IN ACCORDANCE WITH X-RAY CONDITION (RADIOGRAPHY) AT SET DIAPHRAGM POSITION

STEP 93: DETECT X RAYS PASSED THROUGH OBJECT TO BE EXAMINED

STEP 94: DETECT SHIELDED PORTION DATA OF FIRST DIAPHRAGM

STEP 95: IDENTIFY SCATTERED X RAY PORTION

STEP 96: INSERT SECOND DIAPHRAGM INTO SCATTERED X RAY PORTION

STEP 97: PERFORM STATISTICAL PROCESSING ON DATA OF SHIELDED PORTION

STEP 98: PERFORM LINE NOISE CORRECTION PROCESSING ON FLUOROSCOPIC IMAGE

STEP 99: DISPLAY X RAY IMAGE

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